

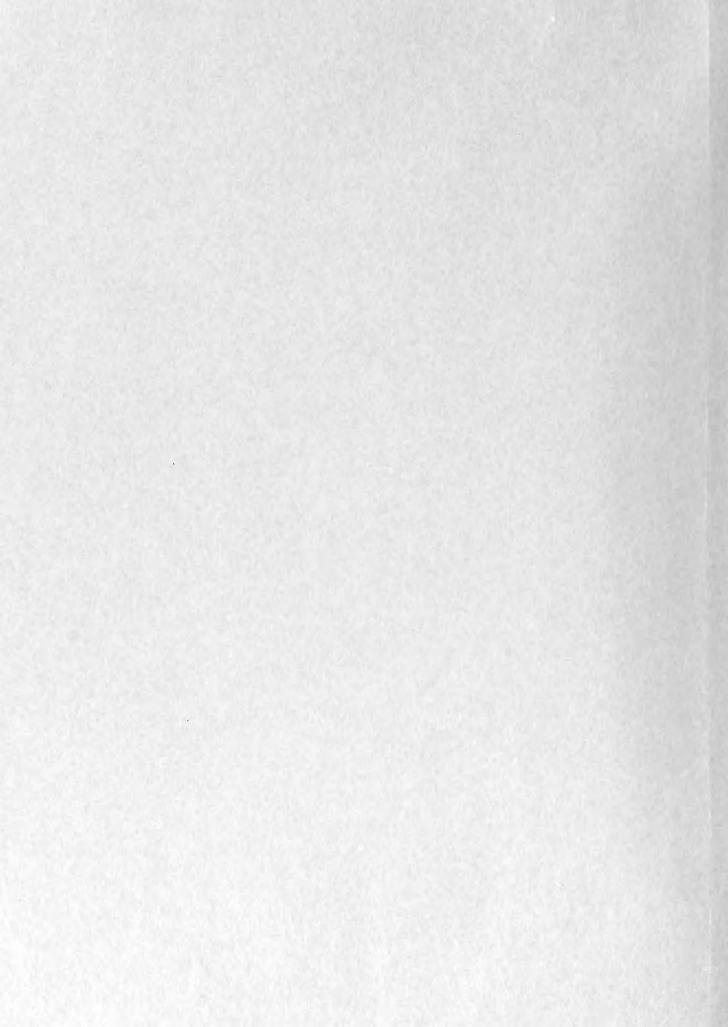
Life Expectancy

Data Years: 1996-1998



1101 Worklon Parks sy Sulla 850

U. S. Department of Health and Human Services
Indian Health Service
Office of Public Health
Office of Program Support
Division of Program Statistics
Demographic Statistics Team



MHO7D 7148

LIFE TABLES FOR THE AMERICAN INDIAN AND ALASKA NATIVE IHS SERVICE POPULATION BY IHS AREA AND GENDER, 1996-1998, WITH COMPARABLE DATA FOR THE U. S. ALL RACES, WHITE, AND BLACK POPULATIONS, 1997

U. S. Department of Health and Human Services
Indian Health Service
Office of Public Health
Office of Program Support
Division of Program Statistics

This report was prepared by Barbara A. Moore, Statistical Assistant, Demographic Statistics Team (DST), Division of Program Statistics.

Additional American Indian and Alaska Native health status Information can be obtained from the Demographic Statistics Team.

Specific responsibilities are as follows:

Edna L. Paisano, Principal Statistician and Director, Division of Program Statistics

Jo Ann N. Pappalardo, Demographic Statistics Acting Team Leader (DST) /Computer Systems Analyst

Colleen M. Ryan, Health Statistician, Demographic Statistics Team

Barbara A. Moore, Statistical Assistant, Demographic Statistics Team

Priscilla Sandoval, Program Analyst, Division of Program Statistics

Indian Health Service
Office of Public Health
Office of Program Support
Division of Program Statistics
12300 Twinbrook Parkway, Suite 450
Rockville, Maryland 20852

Phone: 301-443-1180

Fax: 301-443-1522/4087

This publication, other IHS statistical publications, and links to IHS data files are available on the Program Statistics Web Site: http://www.ihs.gov/NonMedicalPrograms/IHS_Stats/IHS_HQ_Publications.asp

	•			

TABLE OF CONTENTS

	<u>PAGE</u>
Introduction	1
Types of Life Tables	1
Generation versus Period Life Tables	1
Complete versus Abridged Life Tables	2
Adjusting for Misreporting of American Indian and Alaska Native Race	
on State Death Certificates	3
Data Presentations	3
Life Expectancy at Birth	4
Years of Life Remaining for Persons 20-24 Years of Age	4
Years of Life Remaining for Persons 40-44 Years of Age	5
Years of Life Remaining for Persons 60-64 Years of Age	5
Table 1. Life Expectancy at Selected Ages, American Indian and	
Alaska Natives Residing in the IHS Service Area	6-7
APPENDIX .	·
Constructing Abridged Life Tables	A2
Life Table Values	A2
Preliminary Life Table Data	A2-3
F factor	A3
Separation Factor	A3
End-Value Constant	A3
How to Interpret a Life Table	A4-5
Adjusting for Misreporting of Indian Race on State Death Certificates	A5
Life Expectancy Charts (Based on Data Presented in Table 1)	A6-17
Detailed Life Expectancy Tables by IHS Area	A18-56

INTRODUCTION

Life tables are a comprehensive measure of the effect of mortality on life expectancy and are a more refined means of measuring mortality levels in a population than crude, age-specific, or age-adjusted mortality rates. They allow comparison of mortality rates between populations without requiring adjustment to an actual standard population in order to account for differences in age distributions between those populations.

Life tables are routinely prepared by the National Center for Health Statistics (NCHS) by race/ethnicity and gender. NCHS does not, however, prepare life tables for the American Indian and Alaska Native (AI/AN) population. The purpose of this report is to provide life tables for the AI/AN population residing in the service area in which the Indian Health Service (IHS) has responsibilities and to make comparisons between Indian life expectancy and the all races, white, and black U.S. populations. This report also includes a discussion of life table definitions and methodology in order to provide a better understanding of life table data. The life tables included in this report are based on three years of data because of the small numbers of American Indian deaths that occur during a single calendar year.

The starting point for the construction of a life table is a series of age-specific mortality rates developed for that population. All other functions in the table evolve from these rates. The other functions include the number of survivors, the number of deaths, the number of person-years lived at a given age, the number of person-years lived after reaching that age, and the expected future life for a person reaching that age.

Life expectancy is not to be confused with life span. Life expectancy, simply put, is the number of years an average person can expect to live and is measurable using current mortality statistics. Life expectancy varies across generations, countries around the world, by race, and by gender. Life span is the maximum number of years a species expects to live under optimum conditions. Life span has probably not changed in recent times; it is a concept that cannot be measured easily.

TYPES OF LIFE TABLES

GENERATION VERSUS PERIOD LIFE TABLES

It is important to understand some basic concepts regarding life tables. There are two different types of life tables: the generation or cohort life table and the current or period life table. The generation life table is based on the mortality experience of a particular birth cohort, which includes all persons born in a particular year. Preparation of a generation life table requires use of the mortality rates actually experienced by that cohort at each age during its lifetime, until all persons in the cohort have died. It provides a longitudinal picture of the actual lifetime experience of a particular group of people. It is difficult to prepare since it requires compilation of mortality data over a very long period of time, (i.e. 100 years or more), depending on the

number of years the last surviving member of the cohort lives. Because of the extended time period required to complete generation life tables, such tables are seldom prepared.

The current or period life table presented in this report is more commonly used as it is based on a "synthetic" instead of a real birth cohort. A synthetic cohort consists of a population distributed by age as it exists at a particular point in time and is cross-sectional in that it crosses numerous generations and includes people born in many different years. A period life table is representative of the combined mortality experience by age of a cross-section of population at a particular point in time, and is developed based on the applicable age-specific mortality rates for a time era. As such, a synthetic cohort does not represent the actual experience of a real cohort. The current life table provides a "snap shot" of current mortality experience and provides an indicator of the long-term results should current mortality rates prevail.

Both current and generation life tables assume a cohort of 100,000 live births as a starting point. All values generated by the life table evolve from the original 100,000 births.

The current life table itself can be interpreted in two ways. The first interpretation is a birth cohort of 100,000 live births aging over time and subject to the mortality conditions shown over its lifetime. The second interpretation is a "stationary population" in which there are 100,000 live births every year with each birth cohort subject to the same age-specific mortality rates over its lifetime, resulting in a population with an unchanging number and age distribution.

COMPLETE VERSUS ABRIDGED LIFE TABLES

Complete life tables contain data by single year of age; they use counts of the population enumerated during a decennial census and deaths for a three-year period centered on the decennial census year. Abridged life tables contain data by five-year age intervals and are usually prepared annually; however, for this report they have been prepared using three-year aggregated data because of the relatively small number of AI/ANs residing in the counties included in the IHS service delivery area. Annual abridged life tables are prepared by using the most recent decennial life table as a standard and adjusting abridged life table functions to that standard.

The methodology used here was developed by NCHS and is referred to as, "The revised method of computing life tables by reference to a 'standard' table." The appendix provides a brief description of the methodology.

NCHS developed a report that discusses the methodology in detail. Guidance on how to interpret a life table is also included in the appendix.

¹ Comparison of Two Methods of Constructing Abridged Life Tables by Reference to a "Standard" Table. Public Health Service Publication Number 1000, Series 2, Number 4. Revised March 1996.

ADJUSTING FOR MISREPORTING OF INDIAN RACE ON STATE DEATH CERTIFICATES

Misreporting of Indian race on state death certificates occurs, especially in areas distant from traditional Indian reservations. In order to determine the degree and scope of the misreporting, IHS conducted a study utilizing the National Death Index (NDI) maintained by NCHS. The results of the NDI study provide sufficient numbers to calculate adjustments to the number of deaths by sex for each IHS Area, for IHS overall, and for five-year age groups. **Adjusted life expectancies** are considered to be a more accurate representation of Indian life expectancy than unadjusted life expectancies since they are "adjusted" to account for misreporting of American Indian race on state death certificates. Therefore, the analyses in this report are based upon the adjusted life expectancies. For more information on adjusting for misreporting of Indian race on state death certificates, see the *Appendix*.

DATA PRESENTATIONS

A summary table (Table 1) and 12 charts (Charts A1-D3) for AI/AN life expectancies at birth and for persons at several age groups (20-24 years, 40-44 years, and 60-64 years) are presented in this report. Data are provided by gender (all AI/AN, male, and female), and for each IHS Area. For comparison, the table and accompanying charts show the life expectancies for U. S. all races, U. S. white, and U. S. black populations. Life expectancies for other five-year age groups, in addition to those selected for review in this report, are provided in the detailed life expectancy tables found in the *Appendix* at the end of the report.

The life expectancy data presented in this report are based upon data that have been adjusted for the misreporting of AI/AN race on the death certificate. Unadjusted life expectancy data are included in Table 1. Detailed unadjusted life expectancy tables for each of the 12 IHS Areas are available upon request from the Division of Program Statistics. See *Introduction* for contact information.

Table A. Life expectancy at birth, 1996-98

	IHS AREA	ADJUSTED (Years of Life Remaining)
1	California	75.0
2	Nashville	73.6
3	Albuquerque	72.9
4	Oklahoma	72.8
5	Navajo	72.3
6	Portland	70.6
7	Alaska	69.5
8	Phoenix	69.2
9	Billings	68.0
10	Tucson	66.1
11	Aberdeen	65.4
12	Bemidji	65.3

Life expectancy at birth for all twelve IHS Areas was 70.6 years (1996-98). Comparable data for U.S. population (1997) were all races 76.5, white 77.1, and black 71.1.

For each IHS Area, life expectancies for females were higher than those for males. To measure the magnitude of this difference, ratios between the female life expectancies and the male life expectancies by IHS Area are presented (see Table 1). These ratios varied from 1.07 in Nashville to 1.15 in Tucson. For all twelve IHS Areas this ratio was 1.10 (1996-98). The comparable female to male ratios for the (1997) U.S. all races, white, and black populations were 1.08, 1.08, and 1.11 respectively.

YEARS OF LIFE REMAINING FOR PERSONS 20-24 YEARS OF AGE (TABLE 1 AND CHARTS B1, B2, AND B3)

Table B. Years of life remaining at 20-24 years, 1996-98

	IHS AREA	ADJUSTED (Years of Life Remaining)
1	California	56.4
2	Albuquerque	54.2
	Nashville	54.2
4	Oklahoma	54.1
5	Navajo	53.7
6	Portland	52.1
7	Alaska	51.3
8	Phoenix	50.8
9	Billings	49.5
10	Tucson	47.7
11	Aberdeen	47.3
12	Bemidji	47.1

The years of life remaining for the age group 20-24 years for all twelve IHS Areas was 52.2 years. Comparable data for U.S. populations (1997) were all races 52.8, white 53.3, and black 48.2 years.

Ratios of female to male years of life remaining for AI/AN in the age group 20-24 years varied from 1.10 for Nashville to 1.18 for Aberdeen and Tucson. For all twelve IHS Areas this ratio was 1.13. The comparable ratios for the U.S. all races, white, and black populations were 1.11, 1.10, and 1.15, respectively.

YEARS OF LIFE REMAINING FOR PERSONS 40-44 YEARS OF AGE (TABLE 1 AND CHARTS C1, C2, AND C3)

Table C. Years of life remaining at 40-44 years, 1996-98

	IHS AREA	ADJUSTED (Years of Life Remaining)
1	California	38.3
2	Albuquerque	36.8
3	Navajo	36.7
4	Oklahoma	36.3
5	Nashville	36.0
6	Portland	34.3
7	Alaska	33.7
8	Phoenix	33.6
9	Billings	32.1
10	Tucson	31.2
11	Aberdeen	30.2
12	Bemidji	29.5

The years of life remaining for age group 40-44 years for all twelve IHS Areas was 34.6 years. Comparable data for U.S. populations (1997) were all races 34.1, white 34.5, and black 30.5.

Ratios of female to male years of life remaining for AI/AN in the age group 40-44 years varied from 1.09 for Phoenix to 1.20 for Aberdeen. For the twelve IHS Areas this ratio was 1.16. The comparable ratios for the U.S. all races, white, and black populations were 1.14, 1.14, and 1.20 respectively.

YEARS OF LIFE REMAINING FOR PERSONS 60-64 YEARS OF AGE (TABLE 1 AND CHARTS D1, D2, AND D3)

Table D. Years of life remaining at 60-64 years, 1996-98

	IHS AREA	ADJUSTED (Years of Life Remaining)
1	California	22.3
2	Navajo	21.2
3	Oklahoma	21.1
4	Albuquerque	21.0
5	Nashville	20.5
6	Phoenix	18.9
7	Portland	18.6
8	Alaska	18.2
9	Tucson	17.4
10	Billings	16.8
11	Aberdeen	16.4
12	Bemidji	15.3

The years of life remaining for age group 60-64 years for all twelve IHS Areas was 19.4 years. Comparable data for U.S. populations (1997) were all races 17.7, white 17.8, and black 16.1 years.

Ratios of female to male years of life remaining for AI/AN in the age group 60-64 varied from 1.08 for Phoenix to 1.27 for Oklahoma. For the twelve IHS Areas this ratio was 1.19. The comparable ratios for the U.S. all races, white, and black populations were 1.21, 1.21 and 1.24 respectively.

A. LIFE EXPECTANCY AT BIRTH (Years of life remaining)

	Both Sexes				Male			emale	Ratio	
	UNADJ	ADJ	RANK (ADJ)	UNADJ	ADJ	RANK (ADJ)	UNADJ	ADJ	RANK (ADJ)	(Female: Male)
IHS (Ali 12 Areas)	72.9	70.6		69.5	67.4		76.3	74.2		1.10
Aberdeen	65.9	65.4	(11)	61.7	61.2	(12)	70.3	69.9	(11)	1.14
Alaska	70.3	69.5	(7)	67.2	66.3	(8)	73.7	73.0	(7)	1.10
Albuquerque	73.8	72.9	(3)	70.0	69.3	(3)	77.4	76.7	(2)	1.11
Bemidji	68.0	65.3	(12)	65.1	62.6	(10)	70.9	68.3	(12)	1.09
Billings	68.8	68.0	(9)	65.4	64.6	(9)	72.2	71.4	(9)	1.11
California	80.5	75.0	(1)	77.2	71.4	(1)	83.5	78.4	(1)	1.10
Nashville	75.0	73.6	(2)	72.5	70.4	(2)	77.4	75.4	(5)	1.07
Navajo	72.4	72.3	(5)	68.2	68.0	(5)	76.7	76.5	(3)	1.13
Oklahoma	77.9	72.8	(4)	74.3	69.3	(3)	81.1	76.0	(4)	1.10
Phoenix	69.9	69.2	(8)	67.2	66.4	(7)	72.7	72.0	(8)	1.08
Portland	72.1	70.6	(6)	69.5	67.9	(6)	74.7	73.3	(6)	1.08
Tucson	66.4	66.1	(10)	62.0	61.6	(11)	70.8	70.7	(10)	1.15
U.S. All Races (1997)	76.5			73.6			79.4			1.08
U.S. White (1997)	77.1			74.3		,	79.9			1.08
U.S. Black (1997)	71.1			67.2			74.7			1.11

B. LIFE EXPECTANCY, PERSONS 20-24 YEARS (Years of life remaining)

	Both Sexes				Male	Fema				Ratio
	UNADJ	ADJ	RANK (ADJ)	UNADJ	ADJ	RANK (ADJ)	UNADJ	ADJ	RANK (ADJ)	(Female: Male
IHS (12 Areas)	54.3	52.2		51.0	49.1		57.4	55.5		1.13
Aberdeen	47.8	47.3	(11)	43.8	43.4	(12)	51.7	51.4	(12)	1.18
Alaska	52.1	51.3	(7)	49.4	48.6	(7)	55.0	54.3	(7)	1.12
Albuquerque	55.1	54.2	(2)	51.7	51.0	(3)	58.4	57.7	(3)	1.13
Bemidji	49.5	47.1	(12)	47.0	44.6	(10)	52.1	49.7	(11)	1.11
Billings	50.4	49.5	(9)	47.5	46.7	(9)	53.1	52.3	(9)	1.12
California	61.3	56.4	(1)	58.0	53.1	(1)	64.3	59.5	(1)	1.12
Nashville	56.1	54.2	(2)	53.4	51.7	(2)	58.6	57.0	(5)	1.10
Navajo	53.9	53.7	(5)	49.9	49.7	(5)	58.0	57.8	(2)	1.16
Oklahoma	58.6	54.1	(4)	55.1	50.6	(4)	61.8	57.3	(4)	1.13
Phoenix	51.5	50.8	(8)	49.0	48.2	(8)	54.0	53.3	(8)	1.11
Portland	53.3	52.1	(6)	50.8	49.5	(6)	55.8	54.7	(6)	1.11
Tucson	48.0	47.7	(10)	44.2	43.8	(11)	51.8	51.6	(10)	1.18
U.S. All Races (1997)	52.8			50.1			55.4			1.11

^{() =} Area Office rank.

U.S. White (1997)

U.S. Black (1997)

50.6

44.7

55.8

51.4

53.3

48.2

1.10

1.15

UNADJ = Unadjusted; data not adjusted to compensate for misreporting of Al/AN race on state death certificates. ADJ = Adjusted; data adjusted to compensate for misreporting of Al/AN race on state death certificates.

C. LIFE EXPECTANCY, PERSONS 40-44 YEARS (Years of life remaining)

	Both Sexes				Male 🔥 📜		Female			Ratio
	UNADJ	ADJ	RANK (ADJ)	UNADJ	ADJ	RANK (ADJ)	UNADJ	ADJ	RANK (ADJ)	(Female: Male
IHS (12 Areas)	36.4	34.6		33.9	32.2		38.8	37.2		1.16
Aberdeen	30.7	30.2	(11)	27.8	27.5	(11)	33.4	33.1	(11)	1.20
Alaska	34.5	33.7	(7)	32.3	31.6	(8)	36.7	36.1	(7)	1.14
Albuquerque	37.6	36.8	(2)	35.1	34.5	(2)	39.9	39.4	(2)	1.14
Bemidji	31.4	29.5	(12)	29.1	27.2	(12)	33.6	31.7	(12)	1.17
Billings	32.7	32.1	(9)	30.6	29.9	(9)	34.7	34.1	(9)	1.14
California	42.6	38.3	(1)	39.6	35.2	(1)	45.2	41.1	(1)	1.17
Nashville	37.6	36.0	(5)	35.4	33.9	(4)	39.6	38.3	(5)	1.13
Navajo	36.9	36.7	(3)	34.1	34.0	(3)	39.4	39.2	(3)	1.15
Oklahoma	40.5	36.3	(4)	36.7	33.1	(5)	42.8	39.2	(3)	1.18
Phoenix	34.2	33.6	(8)	32.7	32.1	(7)	35.6	35.0	(8)	1.09
Portland	35.3	34.3	(6)	33.3	32.2	(6)	37.3	36.3	(6)	1.13
Tucson	31.5	31.2	(10)	29.0	28.5	(10)	33.8	33.6	(10)	1.18
U.S. All Races (1997)	34.1			31.8			36.3			1.14
U.S. White (1997)	34.5		* * * **	32.1			36.6			1.14
U.S. Black (1997)	30.5		11 6.7	27.5			33.1			1.20

D. LIFE EXPECTANCY, PERSONS 60-64 YEARS (Years of life remaining)

	Both Sexes				Male -	retta esta		- emale	Ratio	
	UNADJ	ADJ	RANK (ADJ)	UNADJ	ADJ	RANK (ADJ)	UNADJ	ADJ	RANK (ADJ)	(Female: Male
IHS (12 Areas)	20.8	19.4		19.1	17.8		22.3	21.2		1.19
Aberdeen	16.7	16.4	(11)	15.4	15.1	(11)	17.8	17.6	(11)	1.17
Alaska	18.8	18.2	(8)	17.4	16.8	(8)	20.1	19.7	(7)	1.17
Albuquerque	21.7	21.0	(4)	20.4	19.9	(1)	22.7	22.3	(4)	1.12
Bemidji	16.6	15.3	(12)	15.0	13.7	(12)	18.1	16.8	(12)	1.23
Billings	17.3	16.8	(10)	15.7	15.2	(10)	18.8	18.3	(10)	1.20
California	25.7	22.3	(1)	23.2	19.6	(3)	27.8	24.7	(1)	1.26
Nashville	21.8	20.5	(5)	20.4	19.2	(4)	22.9	22.0	(5)	1.15
Navajo	21.3	21.2	(2)	19.9	19.7	(2)	22.6	22.5	(3)	1.14
Oklahoma	23.7	21.1	(3)	21.0	18.4	(5)	25.8	23.4	(2)	1.27
Phoenix	19.5	18.9	(6)	18.7	18.1	(6)	20.1	19.6	(8)	1.08
Portland	19.4	18.6	(7)	17.9	17.0	(7)	20.8	20.0	(6)	1.18
Tucson	17.8	17.4	(9)	16.4	15.8	(9)	18.9	18.7	(9)	1.18
U.S. All Races (1997)	17.7			15.9			19.2			1.21
U.S. White (1997)	17.8			16.0		. ,	19.3	4		1.21

^{() =} Area Office rank.

U.S. Black (1997)

17.6

14.2

16.1

1.24

UNADJ = Unadjusted; data not adjusted to compensate for misreporting of AI/AN race on state death certificates. ADJ = Adjusted; data adjusted to compensate for misreporting of Al/AN race on state death certificates.

APPENDIX

Constructing Abridged Life Tables	A2
Life Table Values	A2
Preliminary Life Table Data	A2-3
F factor	A3
Separation Factor	A3
End-Value Constant	A3
How to Interpret a Life Table	A4-5
Adjusting for Misreporting of Indian Race on State Death Certificates	A5
Life Expectancy Charts (Based on Data Presented in Table 1)	A6-17
Detailed Life Expectancy Tables by IHS Area	Δ18-56

CONSTRUCTING ABRIDGED LIFE TABLES

LIFE TABLE VALUES

The life tables in this report include the basic life table functions commonly shown as part of a published life table. The columns in a life table are identified by mathematical symbols as described below.

- $_{n}Q_{x}$ The probability of dying during the age interval.
- l_x The number of persons out of the original 100,000 live births who are still alive at the beginning of the age interval.
- nd_x The number dying during the specified age interval.
- $_{n}L_{x}$ The number of person-years lived during the specified age interval.
- T_x The total number of person-years that will be lived from the beginning of the specified age interval until the last person in the cohort dies.
- e_x^o Life expectancy, the average number of years remaining in the lifetime of a person alive at the beginning of the specified age interval.

PRELIMINARY LIFE TABLE DATA

The following preliminary life table data are not published as part of a life table but are used to generate the life table values described above. Some of these data are fixed constants which have been developed by NCHS for standardizing the abridged tables to the complete decennial life tables. Other preliminary data include mortality and population data used to develop mortality rates. The preliminary data are as follows:

- $_{n}A_{x}$ A set of constants derived by NCHS from the complete decennial life table used as the standard table. These constants are used as adjustment factors to convert the age-specific mortality rates into $_{n}q_{x}$, the probability of dying for each age interval. The conversion of the observed $_{n}M_{x}$ to the $_{n}q_{x}$ in the abridged life table is based on the relationship of the $_{n}M_{x}$ to the $_{n}q_{x}$ in the table being used as the standard. The A constant differs by race and by gender.
- nB_x A set of constants derived by NCHS from the complete decennial life table that is used as the standard table. These constants represent the distribution of deaths within the age interval. They are used to compute nL_x, the number of person years lived during the age interval. Their computation assumes that the age distribution of those dying within the interval is the same within the abridged table as it is within the standard table. The B constant differs by race and by gender.

- _nP_x The estimated midyear population for the age interval.
- $_{n}D_{x}$ The number of deaths for the age interval.
- $_{n}M_{x}$ The age-specific death rate for the age interval.
- $1+_{n}A_{x}*_{n}M_{x}$ A set of adjustment factors used to convert the observed population age-specific mortality rates into the probability of dying, or ${}_{n}q_{x}$ using the ${}_{n}A_{x}$ constant defined above.

Several additional factors that are called into the computations within columns of the spreadsheet are not normally shown individually in a life table. These include an F factor, a separation factor, and an end value constant. These computations are prepared for both genders combined and for each gender separately using different constants for the factors for each of these three population groups.

The *F factor* is used to adjust proportionately the age-specific death rates for the number of deaths with age not stated. It is computed for each life table based on number of deaths not stated in the population under study.

The separation factor is a constant developed by NCHS that is incorporated into the formula computing the infant mortality rate. Normally, the infant mortality rate is computed simply by dividing the number of infant deaths in a given year by the number of births in that year even though infant deaths do not always occur in the year of birth. The purpose of the separation factor is to separate infants dying at less than one year of age into those born in that same year from those born in the previous year. The infant mortality rate is then computed in two parts, using the appropriate number of births as the denominator for the infant deaths which have been "separated" by year of birth.

The *end-value constant* is developed by NCHS and used to compute the number of remaining person-years lived for those age 85 years and older. This is necessary because this age group is an open-ended interval.

HOW TO INTERPRET A LIFE TABLE

Although a life table contains a multitude of numbers and formulas, the primary interest of a life table user is most likely one number, the expected years of life at birth. This number (the expected years of life at birth) is shown as the first number in column seven on each of the life tables (A1-A39). The purpose of all other numbers and formulas within the table is the generation of that number. Life tables are usually prepared by gender because of the substantial difference found between the life expectancy of males and females.

In order to understand the life table concept it is important to understand life table functions and how they are interrelated.

Preliminary life table data are not presented in this report, with the exception of ${}_{n}B_{x}$, is used to compute ${}_{n}Q_{x}$, which is the proportion or probability of dying during the age interval. The first step in the generation of ${}_{n}Q_{x}$ is the computation of the age-specific death rate, or ${}_{n}M_{x}$, from the number of deaths and the population within the age group. ${}_{n}M_{x}$ may differ slightly from the age-specific mortality rates that we normally use because the number of deaths with age not stated are distributed proportionally among the age groups in the computation of ${}_{n}M_{x}$. ${}_{n}M_{x}$ also differs from the normal infant mortality rate due to use of the separation factor as discussed earlier.

The second step toward computing ${}_{n}Q_{x}$ is the development of the adjustment factor, based on the relationship of the age-specific death rates to the probability of dying, ${}_{n}A_{x}$, that was found in the life table used as the standard. The age-specific death rates computed for the life table are then converted to the probability of dying within the interval by multiplying the rate times the length of the age interval and then dividing by the adjustment factor.

The next two life table columns, l_x and $_nd_x$, are interrelated. The first row of column l_x is the beginning cohort of 100,000 live births used as a starting point for any life table. The first row of column $_nd_x$ is the number of those 100,000 who die during this age interval. For each of the succeeding age groups, l_x is the number from the original cohort of 100,000 births who survive to the exact age at the beginning of the age interval. This number is computed by subtracting the number dying, or $_nd_x$, in the previous age interval from the number alive at the beginning of that previous interval. The number dying is computed by applying the probability of dying during the interval, $_nQ_x$, to the number alive at the beginning of the interval, l_x .

Columns $_{n}L_{x}$ and T_{x} are both related to the stationary population. $_{n}L_{x}$ differs from l_{x} in that l_{x} is the number of survivors from a single birth cohort of 100,000 births who survive to the beginning of an age interval, while $_{n}L_{x}$ is the total number of survivors within the age interval based on multiple birth cohorts of 100,000 births each, the number of cohorts depending on the number of years in the age interval identified. For example, the first age group in the life table consists of one birth cohort of 100,000 births. The second age interval is a four-year interval composed of four birth cohorts totaling 400,000 births. The remaining age groups (with the exception of 85+ years) are in five-year intervals of five birth cohorts totaling 500,000 births as

a beginning population. $_{n}L_{x}$ is computed by multiplying the number of single cohort survivors at the beginning of the interval, or l_{x} , by the number of cohorts (based on the size of the age interval) within the age interval and then subtracting deaths for the age interval, $_{n}d_{x}$, which has been adjusted by $_{n}B_{x}$, a conversion factor derived from the "standard" life table.

 T_x is the total number of survivors in the specified age group and all older age groups. It is computed by adding ${}_nL_x$ for the specified age interval to the sum of the ${}_nL_x$'s of older age groups.

Finally e_x^o , or life expectancy, is computed by dividing T_x by l_x for each age interval.

ADJUSTING FOR MISREPORTING OF INDIAN RACE ON STATE DEATH CERTIFICATES

Misreporting of Indian race on state death certificates occurs, especially in areas distant from traditional Indian reservations. In order to determine the degree and scope of the misreporting, IHS conducted a study utilizing the National Death Index (NDI) maintained by the NCHS. The study involved matching IHS patient records of those patients who could have died during 1986 through 1988 with all death records of U.S. residents for 1986 through 1988 as contained on the NDI. The results were published in a document entitled, *Adjusting for Miscoding of Indian Race on State Death Certificates*, November 1996. The study revealed that on 10.9 percent of the matched IHS-NDI records, the race reported for the decedent was other than American Indian or Alaska Native. The percentage of records with inconsistent classification of race ranged from 1.2 percent in the Navajo Area to 28.0 and 30.4 percents in the Oklahoma and California Areas, respectively.

The results of the NDI study provide sufficient numbers to calculate adjustments for each IHS Area, IHS overall, and selected age groups. In addition to these adjustments based on the study findings, IHS assumed the following; a) the results from 1986-88 apply to years beyond 1988 and b) IHS age-group adjustments applied also to each Area. These assumptions cannot be statistically supported by the results of the study. However, IHS felt that it was necessary to adjust all of the death data in this report to provide a meaningful and comprehensive look at life expectancy. IHS also believes that they are reasonable adjustments.

IHS has more specific adjustment factors for the age group under one year. These are derived from the linked birth/infant death data sets produced by the NCHS. IHS is assuming that data years 1994-96 can be adjusted based on the results from prior years of the linked data sets, which is not statistically sound but reasonable. These adjustments for 1994-96 take precedent over the NDI adjustments for the under one-year age group, described above.

Adjusted life expectancies are considered a more accurate representation of Indian life expectancy than actual life expectancies because the "unadjusted" data upon which they are based has been "adjusted" to account for misreporting of Indian race on death certificates. Therefore, the analyses in this report are based upon adjusted life expectancies.

Chart A1. Life Expectancy at Birth, Both Sexes

CY 1996-1998

Years of Life Remaining		U.S. All Races (1997) = 76.5 U.S. White Population (1997) = U.S. Black Population (1997) = 7		
20	40	60	80	
All Ales		70.6 (72.9)		
California	A	75.0 (80.5)		
Nashville		73.6 (75.0)		
Albuquerque		72.9 (73.8)		
Oklahoma		72.8 (77.9)		
Navajo		72.3 (72.4)		
Portland		70.6 (72.1)		
Alaska		69.5 (70.3)		
Phoenix		69.2 (69.9)		
Billings		68.0 (68.8)		
Tucson	66.	1 (66.4)		
Aberdeen	65.4	(65.9)		
Bemidji	65.3	(68.0)		

Chart A2. Life Expectancy at Birth, Males

CY 1996-1998

Years of Life Remaining		U.S. All Races (1997) = 73.0 U.S. White Population (1997) U.S. Black Population (1997)	7) = 74.3
20	40	60	80
Ali (2 IRS Areas		67.4 (69.5)	
California		71.4 77.2)	
Nashville		70.4 (72.5)	
Albuquerque		69.3 (70.0)	
Oklahoma		69.3 (74.3)	
Navajo		68.0 (68.2)	
Portland		67.9 (69.5)	
Phoenix	66	6.4 (67.2)	
Alaska	66.	.3 (67.2)	
Billings	64.6 (65.4)	
Bemidji	62.6 (65.1)		
Tucson 61	.6 (62.0)		
Aberdeen 61	.2 (61.7)		

Chart A3. Life Expectancy at Birth, Females

CY 1996-1998

Years of Life Remaining		U.S. All Races (1997) = 79.4 U.S. White Population (1997) = 79. U.S. Black Population (1997) = 74.	
20	40	60 8	30
ALTO LE ATORE		74.2 (76.3)	
California		78.4 (83.5)	
Albuquerque		76.7 (77.4)	
Navajo		76.5 (76.7)	
Oklahoma		76.0 (81.1)	
Nashville		75.4 (77.4)	
Portland		73.3 (74.7)	
Alaska		73.0 (73.7)	
Phoenix		72.0 (72.7)	
Billings		71.4 (72.2)	
Tucson		70.7 (70.8)	
Aberdeen		69.9 (70.3)	
Bemidji		68.3 (70.9)	

Chart B1. Life Expectancy at 20-24 Years, Both Sexes

CY 1996-1998

Years of Life Remaining	U.S. All Races (1997) = 52.8 U.S. White Population (1997) = 53 U.S. Black Population (1997) = 48			
10 20	30	40	50	60
Ali 2 IIS Areas			52.2 (54.3)	
California			56.4 (61.3	יי
Albuquerque			54.2 (55.1)	
Nashville			54.2 (56.1)	
Oklahoma			54.1 (58.6)	
Navajo			53.7 (53.9)	
Portland			52.1 <i>(</i> 53.3 <i>)</i>	
Alaska		ŧ	51.3 (52.1)	
Phoenix		50	0.8 (51.5)	
Billings		49.5	i (50.4)	
Tucson		47.7 (48.0)	
Aberdeen		47.3 (4	7.8)	
Bemidji		47.1 (4	9.5)	

Chart B2. Life Expectancy at 20-24 Years, Males

CY 1996-1998

U.S. All Races (1997) = 50.1 U.S. White Population (1997) Years of Life Remaining U.S. Black Population (1997)				7) = 50.6
10 20	30	40	50	60
arwis aps.		49.1 (5	1.0)	
California			53.1 (58.0)	
Nashville		51	.7 (53.4)	
Albuquerque		51.0	0 (51.7)	
Oklahoma		50.6	(55.1)	
Navajo		49.7 ((49.9)	
Portland		49.5 ((50.8)	
Alaska		48.6 (4	19.4)	
Phoenix		48.2 (49	9.0)	
Billings	,	46.7 (47.	5)	
Bemidji		44.6 (47.0)		
Tucson		43.8 (44.2)		
Aberdeen		43.4 (43.8)		

Chart B3. Life Expectancy at 20-24 Years, Females

CY 1996-1998

Years of Life Remaining	U.S. All Races (1997) = 55.4 U.S. White Population (1997) = U.S. Black Population (1997) =				
10 20	30	40	50	60	
AIM2 IHS Areas			55.5 (57.4)	Accompany of the Control of the Cont	
California			59.5 (6	64.3)	
Navajo(次文本)。《诗》本《音》、《文诗》(《			57.8 (58.	0)	
Albuquerque	,		57.7 (58.	4)	
Oklahoma			57.0 (58.6		
Nashville			57.3 (61.8		
Portland	` .		54.7 (55.8)		
Alaska Milian Professional Alaska			54.3 (55.0)		
Phoenix			53.3 (54.0)		
Billings		52	2.3 (53.1)		
Tucson		51	1.6 (51.8)		
Aberdeen		51	1.4 (51.7)		
Bemidji		49.7	(52.1)		

Chart C1. Life Expectancy at 40-44 Years, Both Sexes CY 1996-1998

Years of Life Remainin	ια	U.S.	. White F	es (1997) = 34. Population (1997 Population (1997	7) = 34.5
10 20	30		40	50	60
AIMATES Arese	34.6 (36.4)	of the state of th			
California	38.3 (42.6)			
Albuquerque	36.8 <i>(</i> 37	. <i>6)</i>			
Navajo	36.7 (36	5.9)			
Oklahoma	36.3 (40.	5)			
Nashville	36.0 (37.	6)			
Portland	34.3 (35.3)				
Alaska	33.7 (34.5)]			
Phoenix	33.6 (34.2)				
Billings	32.1 <i>(</i> 32.7 <i>)</i>				
Tucson	31.2 (31.5)				
Aberdeen	30.2 <i>(30.7)</i>				
Bemidji 2	29.5 (31.4)				

Chart C2. Life Expectancy at 40-44 Years, Males

CY 1996-1998

Years of Life Rem	aining	U.S. White P	es (1997) = 31 opulation (199 opulation (199	(97) = 32.1
10	20 30	40	50	60
AIJ 12 IHS Areas	32.2 (33.9)			
California	35.2 (39	6)		
Albuquerque	34.5 (35.7	1)		
Navajo	34.0 (34.1	0		
Nashville	33.9 (35.4)			
Oklahoma	33.1 (36.7)			
Portland	32.2 (33.3)			
Phoenix	32.1 (32.7)			
Alaska	31.6 (32.3)			
Billings	29.9 (30.6)			
Tucson	28.5 (29.0)			
Aberdeen	27.5 (27.8)			
Bemidji	27.2 (29.1)			

Chart C3. Life Expectancy at 40-44 Years, Females

CY 1996-1998

Voors of Life Remaining		U.S. White Pe	es (1997) = 36.3 opulation (1997 opulation (1997	7) = 36.6
Years of Life Remaining	30	40	50	60
	37.2	(38.8)		
California		41.1 (45.2)		
Albuquerque	3:	9.4 (39.9)		
Navajo	39	.2 (39.4)		
Oklahoma	39	.2 (42.8)		
Nashville	38.3	3 (39.6)		
Portland	36.3 (37.3)		
Alaska	36.1 <i>(</i> 3	6.7)		
Phoenix	35.0 <i>(</i> 35	(.6)		
Billings	34.1 (34.	7)		
Tucson	33.6 (33.8)			
Aberdeen	33.1 <i>(</i> 33.4 <i>)</i>			
Bemidji	31.7 (33.6)			

Chart D1. Life Expectancy at 60-64 Years, Both Sexes

CY 1996-1998

		aces (1997) = 17.7 Population (1997) = 17.8 Population (1997) = 16.1	
Years of Life Remaining		4(
All 12 IPS Areas 19.4 (20.8)			
California 22.3 (2:	5.7)		
Navajo 21.2 (21.3	3)		
Oklahoma 21.1 (23.7	7)		
Albuquerque 21.0 (21.7	7)		
Nashville 20.5 (21.8)			
Phoenix 18.9 (19.5)			
Portland 18.6 (19.4)			
Alaska 18.2 (18.8)			
Tucson 17.4 (17.8)			
Billings 16.8 (17.3)			
Aberdeen 16.4 (16.7)			
Bemidji 15.3 (16.6)			

Chart D2. Life Expectancy at 60-64 Years, Males

CY 1996-1998

ears of Life Remaining	U.S. All Races (1997) = 19 U.S. White Population (19 U.S. Black Population (19	97) = 16.0
0 10 20	30	40
17.8 (19.1)		
Albuquerque 19.9 (20.4)		
Navajo 19.7 (19.9)		
California 19.6 (23.2)		
Nashville 19.2 (20.4)		
Oklahoma 18.4 (21.0)		
Phoenix 18.1 (18.7)		
Portland 17.0 (17.9)		
Alaska 16.8 (17.4)		
Tucson 15.8 (16.4)		
Billings 15.2 (15.7)		
Aberdeen 15.1 (15.4)		
Bemidji 13.7 (15.0)		

Chart D3. Life Expectancy at 60-64 Years, Females

CY 1996-1998

Years of Life Remaining	U.S. All Races (1997) = U.S. White Population (1 U.S. Black Population (1	997) = 19.3
10 20	30	40
ANTER INSTANÇÃOS 21.2 (22.3)		
California 24.7 (2)	7.8)	
Oklahoma 23.4 (25.8	3)	
Navajo 22.5 (22.6)		
Albuquerque 22.3 (22.7)		
Nashville 22.0 (22.9)		
Portland 20.0 (20.8)		-
Alaska 19.7 (20.1)		
Phoenix 19.6 (20.1)		
Tucson 18.7 (18.9)		
Billings 18.3 (18.8)		
Aberdeen 17.6 (17.8)		
Bemidji 16.8 (18.1)		

Table A1. Life Tables for American Indians and Alaska Natives, Both Sexes in All 12 IHS Areas, 1996-1998 (Adjusted¹)

Average number of years remaining at beginning of age interval (7)	9.02	70.3	66.5	61.6	26.7	52.2	47.7	43.2	38.9	34.6	30.5	26.7	23.0	19.4	16.2	13.2	10.6	8.1	0.0
Total number of person-years lived in this and all subsequent age intervals (6)	7,063,972	6,964,749	6,569,113	6,075,592	5,582,787	5,092,437	4,606,953	4,126,773	3,652,855	3,187,479	2,733,348	2,294,181	1,874,758	1,479,718	1,116,077	792,487	519,167	303,094	147,538
Person-years lived in the age interval (5)	99,223	395,636	493,521	492,805	490,350	485,484	480,180	473,918	465,376	454,131	439,167	419,423	395,040	363,641	323,590	273,320	216,073	155,556	147,538
Number dying during age interval (4)	911	299	155	194	828	1,075	1,040	1,493	1,933	2,599	3,474	4,475	5,306	7,287	8,687	11,426	11,315	12,725	24,778
Number of living at beginning of age interval (3)	100,000	680'66	98,790	98,635	98,441	97,613	96,538	95,498	94,005	92,072	89,473	85,999	81,524	76,218	68,931	60,244	48,818	37,503	24,778
Proportion of persons alive at beginning of age interval dying during interval (2)	0.009114	0.003019	0.001571	0.001966	0.008412	0.011008	0.010770	0.015629	0.020564	0.028232	0.038824	0.052036	0.065084	0.095604	0.126027	0.189658	0.231788	0.339313	1.000000
Period of life between two exact ages stated in years (1)	Under 1 year	1-4 years	5-9 years	10-14 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65-69 years	70-74 years	75-79 years	80-84 years	85+ years

Counts of death by age, sex, and IHS area of residence were adjusted to compensate for race misreporting on the State death certificate.

Table A2. Life Tables for American Indians and Alaska Natives, Both Sexes in Aberdeen Area, 1996-1998 (Adjusted 1)

Average number of years remaining at beginning of age interval (7)	65.4	65.3	61.5	56.6	51.7	47.3	42.9	38.5	34.3	30.2	26.5	23.0	19.7	16.4	13.6	1.1	8.9	6.8	6.4
Total number of person-years lived in this and all subsequent age intervals (6)	6,540,010	6,441,115	6,047,195	5,555,859	5,065,246	4,578,026	4,097,094	3,622,941	3,157,458	2,703,622	2,266,208	1,851,015	1,463,530	1,107,969	792,195	526,587	317,464	166,715	69,784
Person-years lived in the age interval (5)	98,895	393,920	491,336	490,613	487,220	480,932	474,153	465,483	453,836	437,414	415,193	387,485	355,561	315,774	265,608	209,123	150,749	96,931	69,784
Number dying during age interval (4)	1,296	372	117	242	1,181	1,261	1,451	2,055	2,615	4,021	4,980	6,163	609'9	9,359	10,632	11,920	11,260	10,113	14,353
Number of living at beginning of age interval (3)	100.000	98,704	98,332	98,215	97,973	96,792	95,531	94,080	92,025	89,410	85,389	80,409	74,246	67,637	58,278	47,646	35,726	24,466	14,353
Proportion of persons alive at beginning of age interval dying during interval	0.012962	0.003772	0.001189	0.002461	0.012059	0.013023	0.015186	0.021839	0.028413	0.044972	0.058319	0.076645	0.089018	0.138369	0.182443	0.250179	0.315188	0.413369	1.000000
Period of life between two exact ages stated in years	Under 1 vear	1-4 years	5-9 years	10-14 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65-69 years	70-74 years	75-79 years	80-84 years	85+ years

1 Counts of death by age, sex, and IHS area of residence were adjusted to compensate for race misreporting on the State death certificate.

Table A3. Life Tables for American Indians and Alaska Natives, Both Sexes in Alaska Area, 1996-1998 (Adjusted 1)

Average number of years remaining at beginning of age interval (7)	69.5	69.1	65.3	60.4	55.6	51.3	46.9	42.2	37.9	33.7	29.8	25.9	22.0	18.2	14.9	11.6	9.3	6.7	4.7
Total number of person-years lived in this and all subsequent age intervals (6)	6,945,009	6,845,783	6,450,097	5,956,697	5,464,386	4,975,849	4,493,606	4,016,256	3,544,670	3,082,252	2,632,616	2,198,980	1,783,288	1,389,121	1,025,457	701,583	433,391	230,676	94,358
Person-years lived in the age interval (5)	99,226	395,686	493,400	492,311	488,537	482,243	477,350	471,586	462,418	449,636	433,636	415,692	394,167	363,664	323,874	268,192	202,715	136,318	94,358
Number dying during age interval (4)	206	285	231	301	1,269	1,163	775	1,571	2,109	3,050	3,415	3,779	4,875	7,386	8,473	13,868	12,116	14,261	20,166
Number of living at beginning of age interval (3)	100,000	66,093	808'86	98,577	98,276	200,76	95,844	95,069	93,498	91,389	88,339	84,924	81,145	76,270	68,884	60,411	46,543	34,427	20,166
Proportion of persons alive at beginning of age interval dying during interval (2)	0.009073	0.002877	0.002336	0.003056	0.012912	0.011985	0.008085	0.016524	0.022556	0.033376	0.038655	0.044496	0.060075	0.096837	0.123011	0.229562	0.260319	0.414234	1.000000
Period of life between two exact ages stated in years (1) X to X+n	Under 1 year	1-4 years	5-9 years	10-14 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65-69 years	70-74 years	75-79 years	80-84 years	85+ years

1 Counts of death by age, sex, and IHS area of residence were adjusted to compensate for race misreporting on the State death certificate.

Table A4. Life Tables for American Indians and Alaska Natives, Both Sexes in Albuquerque Area, 1996-1998 (Adjusted¹)

								-											
Average number of years remaining at beginning of age interval (7)	72.9	72.4	68.6	63.7	58.8	54.2	49.8	45.2	40.9	36.8	32.5	28.6	24.8	21.0	17.7	14.5	11.3	8.1	5.4
Total number of person-years lived in this and all subsequent age intervals (6)	7,289,952	7,190,553	6,794,017	6,299,151	5,804,827	5,312,864	4,825,579	4,342,985	3,866,273	3,399,027	2,941,584	2,496,487	2,069,137	1,661,598	1,281,748	938,242	635,095	377,359	177,708
Person-years lived in the age interval (5)	66,399	396,536	494,866	494,324	491,963	487,285	482,594	476,712	467,246	457,443	445,097	427,350	407,539	379,850	343,506	303,147	257,736	199,651	177,708
Number dying during age interval (4)	704	569	26	171	818	1,008	828	1,531	2,276	1,626	3,438	3,670	4,273	6,872	7,604	8,509	9,549	13,531	33,196
Number of living at beginning of age interval (3)	100,000	99,296	99,027	98,930	98,759	97,941	96,933	96,075	94,544	92,268	90,642	87,204	83,534	79,261	72,389	64,785	56,276	46,727	33,196
Proportion of persons alive at beginning of age interval dying during interval	0.007035	0.002708	0.000976	0.001725	0.008285	0.010295	0.008849	0.015940	0.024073	0.017617	0.037931	0.042083	0.051149	0.086704	0.105040	0.131342	0.169675	0.289572	1.000000
Period of life between two exact ages stated in years (1)	Under 1 year	1-4 years	5-9 years	10-14 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65-69 years	70-74 years	75-79 years	80-84 years	85+ years

1 Counts of death by age, sex, and IHS area of residence were adjusted to compensate for race misreporting on the State death certificate.

Table A5. Life Tables for American Indians and Alaska Natives, Both Sexes in Bemidji Area, 1996-1998 (Adjusted¹)

Average number of years remaining at beginning of age interval (7)	65.3	65.1	61.3	56.4	51.6	47.1	42.7	38.1	33.7	29.5	25.5	21.8	18.3	15.3	12.4	6.6	8.0	0.9	4.2
Total number of person-years lived in this and all subsequent age intervals (6)	6,534,517	6,435,460	6,040,851	5,548,579	5,057,092	4,569,006	4,086,823	3,610,465	3,140,754	2,680,362	2,233,789	1,807,516	1,407,960	1,044,667	726,586	461,865	262,341	127,436	46,822
Person-years lived in the age interval (5)	99,057	394,609	492,272	491,487	488,086	482,183	476,358	469,711	460,392	446,573	426,273	399,556	363,293	318,081	264,721	199,524	134,905	80,614	46,822
Number dying during age interval (4)	1,105	403	68	332	1,060	1,240	1,078	1,613	2,126	3,464	4,781	5,966	8,658	9,375	11,932	14,117	11,512	10,048	11,122
Number of living at beginning of age interval (3)	100,000	98,895	98,492	98,424	98,092	97,032	95,792	94,714	93,101	90,975	87,511	82,730	76,764	68,106	58,731	46,799	32,682	21,170	11,122
Proportion of persons alive at beginning of age interval dying during interval (2)	0.011052	0.004073	0.000694	0.003375	0.010807	0.012778	0.011249	0.017029	0.022833	0.038073	0.054629	0.072117	0.112794	0.137659	0.203157	0.301659	0.352239	0.474650	1.000000
Period of tife between two exact ages stated in years (1)	Under 1 year	1-4 years	5-9 years	10-14 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65-69 years	70-74 years	75-79 years	80-84 years	85+ years

1 Counts of death by age, sex, and IHS area of residence were adjusted to compensate for race misreporting on the State death certificate.

Table A6. Life Tables for American Indians and Alaska Natives, Both Sexes in Billings Area, 1996-1998 (Adjusted 1)

Period of life between two exact ages stated in years (1)	Proportion of persons alive at beginning of age interval dying during interval	Number of living at beginning of åge interval (3)	Number dying during age interval	Person-years lived in the age interval (5)	Total number of person-years lived in this and all subsequent age intervals (6)	Average number of years remaining at beginning of age interval (7)
	0.044274	400 000	1 127	99 039	6 796 300	089
Under I year 1-4 vears	0.001552	98.873	153	395,123	6,697,261	67.7
5-9 vears	0.001941	98,720	192	493,068	6,302,138	63.8
10-14 years	0.001664	98,528	164	492,327	5,809,070	29.0
15-19 years	0.009383	98,364	923	489,752	5,316,743	54.1
20-24 years	0.012398	97,441	1,208	484,305	4,826,991	49.5
25-29 years	0.010798	96,233	1,039	478,657	4,342,686	45.1
30-34 years	0.020167	95,194	1,920	471,376	3,864,029	40.6
35-39 years	0.019661	93,274	1,834	461,959	3,392,653	36.4
40-44 years	0.026786	91,440	2,449	451,331	2,930,694	32.1
45-49 years	0.050140	88,991	4,462	434,425	2,479,363	27.9
50-54 years	0.059427	84,529	5,023	410,779	2,044,938	24.2
55-59 years	0.066698	79,506	5,303	384,957	1,634,159	20.6
60-64 years	0.123940	74,203	9,197	348,992	1,249,202	16.8
65-69 years	0.185256	900'59	12,043	295,827	900,210	13.8
70-74 years	0.240129	52,963	12,718	233,760	604,383	11.4
75-79 years	0.300883	40,245	12,109	171,242	370,623	9.2
80-84 years	0.438681	28,136	12,343	109,680	199,381	7.1
85+ years	1.000000	15,793	15,793	89,701	89,701	2.7

1 Counts of death by age, sex, and IHS area of residence were adjusted to compensate for race misreporting on the State death certificate.

Table A7. Life Tables for American Indians and Alaska Natives, Both Sexes in California Area, 1996-1998 (Adjusted 1)

Average number of years remaining at beginning of age interval (7)	75.0	74.7	6.07	62.9	61.0	56.4	51.9	47.3	42.8	38.3	34.0	29.9	25.9	22.3	18.8	15.4	12.9	10.9	9.6
Total number of person-years lived in this and all subsequent age intervals (6)	7,497,343	7,398,139	7,002,596	6,508,877	6,015,436	5,523,663	5,035,979	4,552,840	4,074,017	3,600,559	3,134,848	2,679,910	2,239,146	1,818,383	1,424,139	1,062,116	745,603	489,536	300,008
Person-years lived in the age interval (5)	99,204	395,543	493,719	493,441	491,773	487,684	483,139	478,823	473,458	465,711	454,938	440,764	420,763	394,244	362,023	316,513	256,067	189,528	300,008
Number dying during age interval (4)	933	301	40	66	809	1,004	802	937	1,215	1,917	2,450	3,262	4,807	5,797	7,059	11,193	12,848	13,582	31,146
Number of living at beginning of age interval (3)	100,000	290,067	98,766	98,726	98,627	98,019	97,015	96,213	95,276	94,061	92,144	89,694	86,432	81,625	75,828	68,769	57,576	44,728	31,146
Proportion of persons alive at beginning of age interval dying during interval (2)	0.009326	0.003043	0.000408	0.001005	0.006164	0.010244	0.008268	0.009740	0.012749	0,020376	0.026594	0.036370	0.055613	0.071016	0.093086	0.162766	0.223140	0.303660	1.000000
Period of life between two exact ages stated in years (1) x to x+n	Under 1 vear	1-4 vears	5-9 vears	10-14 vears	15-19 vears	20-24 vears	25-29 vears	30-34 vears	35-39 years	40-44 vears	45-49 vears	50-54 years	55-59 years	60-64 years	65-69 vears	70-74 vears	75-79 years	80-84 years	85+ years

Counts of death by age, sex, and IHS area of residence were adjusted to compensate for race misreporting on the State death certificate.

Table A8. Life Tables for American Indians and Alaska Natives, Both Sexes in Nashville Area, 1996-1998 (Adjusted')

Average number of years remaining at beginning of age interval (7)	73.6	72.6	68.9	64.0	29.0	54.2	49.6	45.0	40.4	36.0	31.7	27.6	23.8	20.5	17.0	14.0	11.1	8.4	6.2
Total number of person-years lived in this and all subsequent age intervals (6)	7,359,802	7,259,802	6,860,744	6,363,034	5,865,642	5,369,413	4,876,295	4,386,811	3,901,382	3,422,198	2,951,582	2,492,472	2,050,736	1,634,996	1,251,109	904,715	606,042	362,476	182,091
Person-years lived in the age interval (5)	100.000	399,058	497,710	497,392	496,229	493,118	489,484	485,429	479,184	470,616	459,110	441,736	415,740	383,887	346,394	298,673	243,566	180,385	182,091
Number dying during age interval (4)	0	391	121	25	485	738	711	926	1,593	1,850	2,835	4,186	6,308	6,376	8,611	10,462	11,447	13,653	29,282
Number of living at beginning of age interval (3)	100.000	100,000	609'66	99,488	99,463	98,978	98,240	97,529	96,603	95,010	93,160	90,325	86,139	79,831	73,455	64,844	54,382	42,935	29,282
Proportion of persons alive at beginning of age interval dying during interval	000000	0.003911	0.001211	0.000251	0.004873	0.007460	0.007241	0.009490	0.016493	0.019469	0.030431	0.046347	0.073232	0.079874	0.117235	0.161346	0.210487	0.317987	1.000000
Period of life between two exact ages stated in years (1)	I Inder 1 year	1-4 vears	5-9 years	10-14 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65-69 years	70-74 years	75-79 years	80-84 years	85+ years

1 Counts of death by age, sex, and IHS area of residence were adjusted to compensate for race misreporting on the State death certificate.

Table A9. Life Tables for American Indians and Alaska Natives, Both Sexes in Navajo Area, 1996-1998 (Adjusted 1)

Average number of years remaining at beginning of age interval (7)	72.3	71.8	0.89	63.2	58.3	53.7	49.5	45.0	40.8	36.7	32.7	28.8	25.0	21.2	17.6	14.6	11.8	9.1	8.9
Total number of A- person-years lived in ye this and all subsequent l age intervals (6)	7,227,739	7,128,362	6,732,065	6,237,888	5,744,506	5,253,457	4,767,936	4,288,757	3,816,686	3,354,182	2,903,580	2,467,223	2,047,937	1,648,384	1,272,862	932,223	637,564	394,810	209,927
Person-years lived in the age interval (5)	99,377	396,297	494,177	493,382	491,049	485,521	479,179	472,071	462,504	450,602	436,357	419,286	399,553	375,522	340,639	294,659	242,754	184,883	209,927
Number dying during age interval (4)	730	325	198	185	786	1,399	1,121	1,759	2,071	2,724	3,031	3,839	4,052	5,587	8,382	9,991	10,640	12,350	30,830
Number of living at beginning of age interval (3)	100,000	99,270	98,945	98,747	98,562	97,776	96,377	95,256	93,497	91,426	88,702	85,671	81,832	77,780	72,193	63,811	53,820	43,180	30,830
Proportion of persons alive at beginning of age interval dying during interval (2)	0.007298	0.003275	0,001998	0.001877	0.007980	0.014303	0.011634	0.018468	0.022148	0.029790	0.034172	0.044809	0.049519	0.071829	0.116105	0.156572	0.197705	0.286013	1.000000
Period of life between two exact ages stated in years (1) X to x+n	Under 1 year	1-4 vears	5-9 vears	10-14 vears	15-19 vears	20-24 vears	25-29 vears	30-34 vears	35-39 years	40-44 vears	45-49 vears	50-54 years	55-59 years	60-64 years	65-69 vears	70-74 years	75-79 years	80-84 years	85+ years

1 Counts of death by age, sex, and IHS area of residence were adjusted to compensate for race misreporting on the State death certificate.

Table A10. Life Tables for American Indians and Alaska Natives, Both Sexes in Oklahoma Area, 1996-1998 (Adjusted¹)

Average number of years remaining at beginning of age interval (7)	72.8	72.3	68.5	63.6	58.7	54.1	49.6	45.0	40.6	36.3	32.2	28.2	24.6	21.1	18.0	14.7	12.2	9.6	7.7
Total number of person-years lived in this and all subsequent age intervals (6)	7,275,650	7,176,309	6,780,057	6,285,711	5,791,931	5,300,041	4,812,235	4,329,110	3,851,630	3,381,533	2,921,249	2,474,402	2,046,532	1,643,372	1,271,220	934,973	643,685	405,843	226,599
Person-years lived in the age interval (5)	99,341	396,252	494,346	493,780	491,890	487,806	483,125	477,480	470,097	460,284	446,847	427,870	403,160	372,152	336,247	291,288	237,842	179,244	226,599
Number dying during age interval (4)	772	274	153	118	681	918	951	1,331	1,627	2,333	3,120	4,546	5,365	7,059	7,222	10,796	10,431	12,849	29,454
Number of living at beginning of age interval (3)	100,000	99,228	98,954	98,801	98,683	98,002	97,084	96,133	94,802	93,175	90,842	87,722	83,176	77,811	70,752	63,530	52,734	42,303	29,454
Proportion of persons alive at beginning of age interval dying during interval	0.007724	0.002759	0.001542	0.001193	0.006903	0.009369	0.008800	0.013846	0.017158	0.025039	0.034342	0.051828	0.064499	0.090722	0.102074	0.169929	0.197796	0.303737	1.000000
Period of life between two exact ages stated in years (1) X to X+n	Under 1 year	1-4 years	5-9 years	10-14 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65-69 years	70-74 years	75-79 years	80-84 years	85+ years

1 Counts of death by age, sex, and IHS area of residence were adjusted to compensate for race misreporting on the State death certificate.

Table A11. Life Tables for American Indians and Alaska Natives, Both Sexes in Phoenix Area, 1996-1998 (Adjusted 1)

1 Counts of death by age, sex, and IHS area of residence were adjusted to compensate for race misreporting on the State death certificate.

Table A12. Life Tables for American Indians and Alaska Natives, Both Sexes in Portland Area, 1996-1998 (Adjusted 1)

Average number of years remaining at beginning of age interval (7)	70.6	70.3	66.5	61.6	56.8	52.1	47.6	43.1	38.6	34.3	30.2	26.4	22.5	18.6	15.3	12.3	2.6	7.5	5.8
Total number of person-years lived in this and all subsequent age intervals (6)	7,061,195	6,961,978	6,566,399	6,073,175	5,580,878	5,090,748	4,604,849	4,124,071	3,648,829	3,180,781	2,723,507	2,281,527	1,858,055	1,455,395	1,082,318	752,189	476,131	264,777	123,674
Person-years lived in the age interval (5)	99,217	395,579	493,224	492,297	490,130	485,899	480,778	475,242	468,048	457,274	441,980	423,472	402,660	373,077	330,129	276,058	211,354	141,103	123,674
Number dying during age interval (4)	918	311	228	219	665	866	1,047	1,182	1,710	2,644	3,564	3,851	4,494	7,420	9,739	11,873	13,865	14,038	21,234
Number of living at beginning of age interval (3)	100,000	99,082	98,771	98,543	98,324	97,659	96,661	95,614	94,432	92,722	90,078	86,514	82,663	78,169	70,749	61,010	49,137	35,272	21,234
Proportion of persons alive at beginning of age interval dying during interval	0.009179	0.003139	0.002306	0.002223	0.006765	0.010222	0.010831	0.012360	0.018110	0.028520	0.039571	0.044515	0.054365	0.094918	0.137653	0.194601	0.282164	0.397986	1.000000
Period of life between two exact ages stated in years (1) x to x+n	Under 1 year	1-4 years	5-9 years	10-14 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65-69 vears	70-74 vears	75-79 vears	80-84 vears	85+ years

1 Counts of death by age, sex, and IHS area of residence were adjusted to compensate for race misreporting on the State death certificate.

Table A13. Life Tables for American Indians and Alaska Natives, Both Sexes in Tucson Area, 1996-1998 (Adjusted 1)

of Average number of d in years remaining at quent beginning of age interval (7)	66.1	65.7	61.8	56.9	52.1	47.7	43.2	39.0	35.0	31.2	27.3	23.8	20.9	17.4	15.1	12.2	10.0	7.2	5.6
Total number of person-years lived in this and all subsequent age intervals (6)	6,609,901	6,510,637	6,114,665	5,620,621	5,127,628	4,638,117	4,154,297	3,677,754	3,211,782	2,760,411	2,325,939	1,911,881	1,527,804	1,175,931	863,049	597,190	379,382	210,784	95,202
Person-years lived in the age interval (5)	99,264	395,972	494,044	492,993	489,511	483,820	476,543	465,972	451,371	434,472	414,058	384,077	351,873	312,882	265,859	217,808	168,598	115,582	95,202
Number dying during age interval (4)	863	239	161	363	1,053	1,160	1,766	2,509	3,351	3,423	4,874	7,244	5,524	10,218	8,413	10,806	8,710	12,356	16,967
Number of living at beginning of age interval (3)	100,000	99,137	98,898	98,737	98,374	97,321	96,161	94,395	91,886	88,535	85,112	80,238	72,994	67,470	57,252	48,839	38,033	29,323	16,967
Proportion of persons alive at beginning of age interval dying during interval (2)	0.008630	0.002415	0.001627	0.003678	0.010699	0.011916	0.018370	0.026582	0.036471	0.038667	0.057263	0.090284	0.075679	0.151445	0.146949	0.221261	0.229000	0.421365	1.000000
Period of life between two exact ages stated in years (1) X to x+n	Under 1 year	1-4 years	5-9 years	10-14 years	15-19 years	20-24 years	25-29 vears	30-34 vears	35-39 years	40-44 vears	45-49 vears	50-54 years	55-59 years	60-64 years	65-69 years	70-74 vears	75-79 vears	80-84 years	85+ years

1 Counts of death by age, sex, and IHS area of residence were adjusted to compensate for race misreporting on the State death certificate.

Table A14. Life Tables for American Indian and Alaska Native Males in All 12 IHS Areas, 1996-1998 (Adjusted 1)

ber of ing at fage																			
Average number of years remaining at beginning of age interval (7)	67.4	67.1	63.3	58.4	53.5	49.1	44.8	40.5	36.3	32.2	28.4	24.7	21.1	17.8	14.8	11.9	9.8	7.7	6.1
Total number of person-years lived in this and all subsequent age intervals (6)	6,737,062	6,637,927	6,242,673	5,749,677	5,257,467	4,768,628	4,286,592	3,811,976	3,345,845	2,890,854	2,450,250	2,028,117	1,629,280	1,259,037	924,938	634,741	399,409	224,867	108,075
Person-years lived in the age interval (5)	99,135	395,254	492,996	492,210	488,839	482,036	474,616	466,131	454,991	440,604	422,133	398,837	370,243	334,099	290,197	235,332	174,542	116,792	108,075
Number dying during age interval (4)	1,009	299	167	242	1,156	1,491	1,465	1,968	2,494	3,290	4,188	5,196	6,271	8,181	9,298	12,596	11,474	11,395	17,820
Number of living at beginning of age interval (3)	100,000	98,991	98,692	98,525	98,283	97,127	95,636	94,171	92,203	89,709	86,419	82,231	77,035	70,764	62,583	53,285	40,689	29,215	17,820
Proportion of persons alive at beginning of age interval dying during interval (2)	0.010090	0.003024	0.001689	0.002461	0.011763	0.015350	0.015323	0.020898	0.027052	0.036679	0.048460	0.063194	0.081403	0.115617	0.148569	0.236395	0.282005	0.390027	1.000000
Period of life between two exact ages stated in years (1)	Under 1 year	1-4 years	5-9 years	10-14 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65-69 years	70-74 years	75-79 years	80-84 years	85+ years

Counts of death by age, sex, and IHS area of residence were adjusted to compensate for race misreporting on the State death certificate.

Table A15. Life Tables for American Indian and Alaska Native Males in Aberdeen Area, 1996-1998 (Adjusted 1)

beginning of age Number of living at interval dying beginning of age interval dying interval dying interval dying beginning of age interval dying interval dying interval dying age interval in the age interval during interval in the age interval in the age interval in the age interval directly and directly directly and directly directly directly directly directly and directly d		Proportion of persons alive at		-		Total number of person-years lived	Average number of
(2) (3) (4) (2) (3) (4) (3) (4) (4) (4) (5) (4) (4) (6) (1453) (100,000 (1,453) (7) (100,001 (1,453) (7) (100,002 (1,453) (7) (100,002 (1,453) (7) (100,002 (1,453) (7) (100,002 (1,452) (7) (100,002 (1,452) (7) (100,002 (1,452) (7) (100,002 (1,452) (7) (100,002 (1,452) (7) (100,002 (1,452) (7) (100,002 (1,452) (7) (100,002 (1,462) (7	Period of life between two exact	beginning of age interval dying	Number of living at beginning of age interval	Number dying	Person-years lived in the age interval	in this and all subsequent age intervals	years remaining at beginning of age interval
n@x lx nDx 0.014530 100,000 1,453 0.004781 98,547 471 0.002043 98,076 200 0.002043 98,076 200 0.003152 97,876 308 0.016372 97,568 1,597 0.021154 95,971 2,937 0.018863 92,169 2,991 0.032449 92,169 2,991 0.045842 89,178 4,088 0.045842 89,178 4,088 0.061905 85,090 5,267 0.076983 79,823 6,145 0.101546 73,678 7,482 0.159823 58,089 9,284 0.214774 48,805 10,482 0.307927 38,323 11,801 0.3413172 16,975 7,014	ages stated in years (1)	auring interval	(3)	(4)	(5)	(9)	(7)
0.014530 100,000 1,453 0.004781 98,547 471 0.002043 98,076 200 0.003152 97,876 308 0.016372 97,568 1,597 0.021154 95,971 2,030 0.032449 92,169 2,991 0.045842 89,178 4,088 0.061905 85,090 5,267 0.076983 73,678 7,482 0.101546 73,678 7,482 0.159823 58,089 9,284 0.214774 48,805 10,482 0.307927 38,323 11,801 0.31772 26,522 9,547 0.413172 16,975 7,014	x to x+n	nQx	X	иDх	nLx	Tx	EX
0.004781 98,547 471 0.002043 98,076 200 0.003152 97,876 308 0.016372 97,568 1,597 0.021154 95,971 2,030 0.018863 93,941 1,772 0.032449 92,169 2,991 0.045842 89,178 4,088 0.061905 85,090 5,267 0.076983 73,678 6,145 0.101546 73,678 8,107 0.122468 66,196 8,107 0.159823 58,089 9,284 0.214774 48,805 10,482 0.307927 38,323 11,801 0.359973 26,522 9,547 0.413172 16,975 7,014	Under 1 year	0.014530	100,000	1,453	98,755	6,123,550	61.2
0.002043 98,076 200 0.003152 97,876 308 0.016372 97,568 1,597 0.021154 95,971 2,030 0.032449 92,169 2,991 0.045842 89,178 4,088 0.061905 85,090 5,267 0.076983 79,823 6,145 0.101546 73,678 7,482 0.122468 66,196 8,107 0.159823 58,089 9,284 0.214774 48,805 10,482 0.307927 38,323 11,801 0.359973 26,522 9,547 0.413172 16,975 7,014	1-4 years	0.004781	98,547	471	393,069	6,024,795	61.1
0.003152 97,876 308 0.016372 97,568 1,597 0.021154 95,971 2,030 0.018863 93,941 1,772 0.032449 92,169 2,991 0.045842 89,178 4,088 0.061905 85,090 5,267 0.076983 79,823 6,145 0.101546 73,678 7,482 0.122468 66,196 8,107 0.159823 58,089 9,284 0.214774 48,805 10,482 0.307927 38,323 11,801 0.359973 26,522 9,547 0.413172 16,975 7,014	5-9 years	0.002043	98,076	200	489,825	5,631,726	57.4
0.016372 97,568 1,597 0.021154 95,971 2,030 0.018863 93,941 1,772 0.032449 92,169 2,991 0.045842 89,178 4,088 0.061905 85,090 5,267 0.076983 79,823 6,145 0.101546 73,678 7,482 0.122468 66,196 8,107 0.159823 58,089 9,284 0.214774 48,805 10,482 0.307927 38,323 11,801 0.359973 26,522 9,547 0.413172 16,975 7,014	10-14 years	0.003152	97,876	308	488,851	5,141,901	52.5
0.021154 95,971 2,030 0.018863 93,941 1,772 0.032449 92,169 2,991 0.045842 89,178 4,088 0.061905 85,090 5,267 0.076983 79,823 6,145 0.101546 73,678 7,482 0.122468 66,196 8,107 0.159823 58,089 9,284 0.214774 48,805 10,482 0.307927 38,323 11,801 0.359973 26,522 9,547 0.413172 16,975 7,014	15-19 years	0.016372	97,568	1,597	484,281	4,653,050	47.7
0.018863 93,941 1,772 0.032449 92,169 2,991 0.045842 89,178 4,088 0.061905 85,090 5,267 0.076983 73,678 6,145 0.101546 73,678 7,482 0.122468 66,196 8,107 0.159823 58,089 9,284 0.214774 48,805 10,482 0.307927 38,323 11,801 0.359973 26,522 9,547 0.413172 16,975 7,014	20-24 years	0.021154	95,971	2,030	474,954	4,168,769	43.4
0.032449 92,169 2,991 0.045842 89,178 4,088 0.061905 85,090 5,267 0.076983 79,823 6,145 0.101546 73,678 7,482 0.122468 66,196 8,107 0.159823 58,089 9,284 0.214774 48,805 10,482 0.307927 38,323 11,801 0.359973 26,522 9,547 0.413172 16,975 7,014	25-29 years	0.018863	93,941	1,772	465,394	3,693,815	39.3
0.045842 89,178 4,088 0.061905 85,090 5,267 0.076983 79,823 6,145 0.101546 73,678 7,482 0.122468 66,196 8,107 0.159823 58,089 9,284 0.214774 48,805 10,482 0.307927 38,323 11,801 0.359973 26,522 9,547 0.413172 16,975 7,014	30-34 years	0.032449	92,169	2,991	453,666	3,228,421	35.0
0.061905 85,090 5,267 0.076983 79,823 6,145 0.101546 73,678 7,482 0.122468 66,196 8,107 0.159823 58,089 9,284 0.214774 48,805 10,482 0.307927 38,323 11,801 0.359973 26,522 9,547 0.413172 16,975 7,014	35-39 years	0.045842	89,178	4,088	436,015	2,774,755	31.1
0.076983 79,823 6,145 0.101546 73,678 7,482 0.122468 66,196 8,107 0.159823 58,089 9,284 0.214774 48,805 10,482 0.307927 38,323 11,801 0.359973 26,522 9,547 0.413172 16,975 7,014	40-44 years	0.061905	85,090	5,267	412,737	2,338,740	27.5
0.101546 73,678 7,482 0.122468 66,196 8,107 0.159823 58,089 9,284 0.214774 48,805 10,482 0.307927 38,323 11,801 0.359973 26,522 9,547 0.413172 16,975 7,014	45-49 years	0.076983	79,823	6,145	384,498	1,926,003	24.1
0.122468 66,196 8,107 0.159823 58,089 9,284 0.214774 48,805 10,482 0.307927 38,323 11,801 0.359973 26,522 9,547 0.413172 16,975 7,014	50-54 years	0.101546	73,678	7,482	350,653	1,541,505	20.9
0.159823 58,089 9,284 0.214774 48,805 10,482 0.307927 38,323 11,801 0.359973 26,522 9,547 0.413172 16,975 7,014	55-59 years	0.122468	66,196	8,107	311,676	1,190,852	18.0
0.214774 48,805 10,482 0.307927 38,323 11,801 0.359973 26,522 9,547 0.413172 16,975 7,014	60-64 years	0.159823	58,089	9,284	268,065	879,176	15.1
0.307927 38,323 11,801 0.359973 26,522 9,547 0.413172 16,975 7,014	65-69 years	0.214774	48,805	10,482	218,414	611,111	12.5
0.359973 26,522 9,547 0.413172 16,975 7,014	70-74 years	0.307927	38,323	11,801	162,484	392,697	10.2
0.413172 16,975 7,014	75-79 years	0.359973	26,522	9,547	108,561	230,213	8.7
	80-84 years	0.413172	16,975	7,014	66,850	121,652	7.2
1.000000 9,961 9,961	85+ years	1.000000	9,961	9,961	54,802	54,802	5.5

' Counts of death by age, sex, and IHS area of residence were adjusted to compensate for race misreporting on the State death certificate.

Table A16. Life Tables for American Indian and Alaska Native Males in Alaska Area, 1996-1998 (Adjusted 1)

Average number of years remaining at beginning of age interval (7)	66.3	0.99	62.2	57.4	52.6	48.6	44.4	40.0	35.7	31.6	27.8	24.3	20.5	16.8	13.6	10.6	8.8	8.9	0.9
Total number of person-years lived in this and all subsequent age intervals (6)	6,631,678	6,532,608	6,137,641	5,645,192	5,153,838	4,668,098	4,192,032	3,723,240	3,262,015	2,811,216	2,375,204	1,959,948	1,566,777	1,197,100	860,864	568,348	337,436	176,372	79,356
Person-years lived in the age interval (5)	020'66	394,967	492,449	491,354	485,740	476,066	468,792	461,225	450,799	436,012	415,256	393,171	369,677	336,236	292,516	230,912	161,064	97,016	79,356
Number dying during age interval (4)	1,085	292	240	327	2,037	1,669	1,216	1,852	2,323	3,639	4,769	4,043	5,402	8,004	9,411	15,209	12,444	12,909	13,129
Number of living at beginning of age interval (3)	100,000	98,915	98,623	98,383	98,056	96,019	94,350	93,134	91,282	88,959	85,320	80,551	76,508	71,106	63,102	53,691	38,482	26,038	13,129
Proportion of persons alive at beginning of age interval dying during interval (2)	0.010853	0.002949	0.002432	0.003327	0.020772	0.017379	0.012883	0.019886	0.025445	0.040903	0.055892	0.050195	0.070608	0.112567	0.149136	0.283265	0.323373	0.495759	1.000000
Period of life between two exact ages stated in years (1) x to x+n	Under 1 year	1-4 years	5-9 years	10-14 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65-69 years	70-74 years	75-79 years	80-84 years	85+ years

1 Counts of death by age, sex, and IHS area of residence were adjusted to compensate for race misreporting on the State death certificate.

Table A17. Life Tables for American Indian and Alaska Native Males in Albuquerque Area, 1996-1998 (Adjusted 1)

Average number of years remaining at beginning of age interval (7)	69.3	68.9	65.1	60.2	55.3	51.0	46.7	42.2	38.3	34.5	30.4	26.8	23.4	19.9	17.1	14.1	1.1	8.4	0.9
Total number of person-years lived in this and all subsequent age intervals (6)	6,930,985	6,831,750	6,435,909	5,941,823	5,448,335	4,958,402	4,475,242	3,998,653	3,531,184	3,077,277	2,637,166	2,213,355	1,812,230	1,437,402	1,096,285	795,135	533,877	319,035	159,169
Person-years lived in the age interval (5)	99,235	395,841	494,086	493,488	489,933	483,160	476,589	467,469	453,907	440,111	423,811	401,125	374,828	341,117	301,150	261,258	214,842	159,866	159,169
Number dying during age interval (4)	893	247	77	249	1,228	1,396	1,217	2,498	2,926	2,583	4,044	5,098	5,414	8,103	7,770	8,113	10,273	11,475	26,396
Number of living at beginning of age interval (3)	100,000	99,107	98,860	98,783	98,534	92,306	95,910	94,693	92,195	89,269	989'98	82,642	77,544	72,130	64,027	56,257	48,144	37,871	26,396
Proportion of persons alive at beginning of age interval dying during interval (2)	0.008931	0.002489	0.000778	0.002523	0.012463	0.014349	0.012690	0.026378	0.031734	0.028935	0.046653	0.061687	0.069824	0.112344	0.121359	0.144205	0.213375	0.302990	1.000000
Period of life between two exact ages stated in years (1) x to x+n	Under 1 year	1-4 years	5-9 years	10-14 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65-69 years	70-74 years	75-79 years	80-84 years	85+ years

Counts of death by age, sex, and IHS area of residence were adjusted to compensate for race misreporting on the State death certificate.

Table A18. Life Tables for American Indian and Alaska Native Males in Bemidji Area, 1996-1998 (Adjusted 1)

Average number of years remaining at beginning of age interval (7)	62.6	58.6	53.6	48.9	44.6	40.3	35.7	31.5	27.2	23.6	20.1	16.5	13.7	11.0	8.5	7.3	5.8	4.3
Total number of person-years lived in this and all subsequent age intervals (6)	6,255,703	5,763,114	5,271,789	4,781,247	4,295,612	3,817,787	3,346,380	2,883,176	2,431,227	1,996,553	1,587,117	1,206,063	864,547	574,716	342,362	179,859	82,642	29,857
Person-years lived in the age interval (5)	98,864	491,325	490,542	485,635	477,825	471,407	463,204	451,949	434,674	409,436	381,054	341,516	289,831	232,354	162,503	97,217	52,785	29,857
Number dying during age interval (4)	1,326	0	456	1,530	1,479	1,066	2,277	2,209	4,792	5,400	6,001	9,978	10,601	12,289	15,569	10,271	7,374	6,973
Number of living at beginning of age interval (3)	100,000	98,265	98,265	608'26	96,279	94,800	93,734	91,457	89,248	84,456	79,056	73,055	63,077	52,476	40,187	24,618	14,347	6,973
Proportion of persons alive at beginning of age interval dying during interval (2)	0.013262	0.00000	0.004645	0.015644	0.015357	0.011241	0.024295	0.024155	0.053690	0.063942	0.075905	0.136586	0.168062	0.234174	0.387409	0.417223	0.514002	1.000000
Period of life between two exact ages stated in years (1) x to x+n	Under 1 year	5-9 years	10-14 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65-69 years	70-74 years	75-79 years	80-84 years	85+ years

1 Counts of death by age, sex, and IHS area of residence were adjusted to compensate for race misreporting on the State death certificate.

Table A19. Life Tables for American Indian and Alaska Native Males in Billings Area, 1996-1998 (Adjusted 1)

Period of life between two exact ages stated in years (1) X to x+n	Proportion of persons alive at beginning of age interval dying during interval (2)	Number of living at beginning of age interval (3)	Number dying during age interval (4)	Person-years lived in the age interval (5)	Total number of person-years lived in this and all subsequent age intervals (6)	Average number of years remaining at beginning of age interval (7)
Under 1 year	0.016108	100,000	1,611	98,619	6,459,627	64.6
1-4 years	0.001286	98,389	127	393,254	6,361,008	64.7
5-9 years	0.002847	98,262	280	490,533	5,967,754	60.7
10-14 years	0.002702	97,982	265	489,455	5,477,221	55.9
15-19 years	0.014112	97,717	1,379	485,512	4,987,766	51.0
20-24 years	0.018877	96,338	1,819	477,299	4,502,254	46.7
25-29 years	0.015731	94,519	1,487	468,977	4,024,955	42.6
30-34 years	0.025330	93,032	2,356	459,505	3,555,978	38.2
35-39 years	0.024057	90,676	2,181	448,112	3,096,473	34.1
40-44 years	0.032092	88,495	2,840	435,620	2,648,361	29.9
45-49 years	0.051871	85,655	4,443	417,707	2,212,741	25.8
50-54 years	0.075154	81,212	6,103	391,592	1,795,034	22.1
55-59 years	0.087102	75,109	6,542	359,967	1,403,442	18.7
60-64 years	0.148558	68,567	10,186	318,281	1,043,475	15.2
65-69 years	0.193121	58,381	11,275	264,356	725,194	12.4
70-74 years	0.343047	47,106	16,160	195,639	460,838	8.6
75-79 years	0.353438	30,946	10,937	127,180	265,199	8.6
80-84 years	0.479594	20,009	9,596	75,385	138,019	6.9
85+ years	1.000000	10,413	10,413	62,634	62,634	0.9

1 Counts of death by age, sex, and IHS area of residence were adjusted to compensate for race misreporting on the State death certificate.

Table A20. Life Tables for American Indian and Alaska Native Males in California Area, 1996-1998 (Adjusted 1)

Period of life	rroportion of persons alive at beginning of age	Number of living at		:	person-years lived in this and all	Average number of years remaining at
between two exact ages stated in years	interval dying during interval	beginning of age interval	Number dying during age interval	Person-years lived in the age interval	subsequent age intervals	beginning of age interval
(E)	(2)	(3)	(4)	(5)	(9)	(7)
x to x+n	nQx	×	nDx	nLx	Τ×	Ex
Under 1 year	0.012018	100,000	1,202	98,970	7,144,881	71.4
1-4 years	0.002678	98,798	265	394,563	7,045,911	71.3
5-9 years	0.00000	98,533	0	492,665	6,651,348	67.5
10-14 years	0.000846	98,533	83	492,523	6,158,683	62.5
15-19 years	0.009195	98,450	905	490,233	5,666,160	57.6
20-24 years	0.010057	97,545	981	485,357	5,175,927	53.1
25-29 years	0.011564	96,564	1,117	480,103	4,690,570	48.6
30-34 years	0.012594	95,447	1,202	474,350	4,210,467	44.1
35-39 years	0.015968	94,245	1,505	467,590	3,736,117	39.6
40-44 years	0.025283	92,740	2,345	458,040	3,268,527	35.2
45-49 years	0.037604	90,395	3,399	443,890	2,810,487	31.1
50-54 years	0.038554	966,98	3,354	427,029	2,366,597	27.2
55-59 years	0.064861	83,642	5,425	405,292	1,939,568	23.2
60-64 years	0.096145	78,217	7,520	372,958	1,534,276	19.6
65-69 years	0.110213	70,697	7,792	334,447	1,161,318	16.4
70-74 years	0.195556	62,905	12,301	284,160	826,871	13.1
75-79 years	0.283700	50,604	14,356	216,857	542,711	10.7
80-84 years	0.373340	36,248	13,533	146,462	325,854	0.6
85+ years	1.000000	22,715	22,715	179,392	179,392	7.9

Counts of death by age, sex, and IHS area of residence were adjusted to compensate for race misreporting on the State death certificate.

Table A21. Life Tables for American Indian and Alaska Native Males in Nashville Area, 1996-1998 (Adjusted 1)

Average number of years remaining at beginning of age interval (7)	70.4	0.07	66.3	61.4	56.4		47.2	42.6	2.1	33.9	29.7	5.7	22.2	19.2	16.0	13.2	10.8	8.3	9.9
Average 1 years rem beginnin inte	20	20	99	61	56	51	47	42	38.1	33	26	25.7	22	16	16	13	10	ω .	9
Total number of person-years lived in this and all subsequent age intervals (6)	7,042,936	6,943,652	6,547,852	6,054,228	5,561,004	5,069,255	4,581,600	4,098,548	3,620,424	3,150,662	2,691,951	2,246,315	1,821,430	,428,693	,074,178	761,826	500,709	295,682	150,415
	7	9	9	Ó	ູດ	 	4	4	ຕົ	٣	2	7	₹	-	~		4,7		
Person-years lived in the age interval (5)	99,284	395,800	493,624	493,224	491,749	487,655	483,052	478,124	469,762	458,711	445,636	424,885	392,737	354,515	312,352	261,117	205,027	145,267	150,415
Number dying during age interval (4)	835	362	141	20	588	1,021	807	1,190	2,181	2,243	3,058	5,372	7,569	7,633	9,167	11,261	10,950	12,683	22,889
Number of living at beginning of age interval (3)	100,000	99,165	98,803	98,662	98,612	98,024	97,003	96,196	92,006	92,825	90,582	87,524	82,152	74,583	66,950	57,783	46,522	35,572	22,889
Proportion of persons alive at beginning of age interval dying during interval (2)	0.008346	0.003651	0.001430	0.000506	0.005963	0.010412	0.008322	0.012369	0.022954	0.024168	0.033756	0.061381	0.092136	0.102340	0.136924	0.194884	0.235372	0.356556	1.000000
Proportion Period of life beginning of between two exact interval dyin during interval (1) (1) A to X+n Proportion Proportion persons alive interval dyin during interval (2)	Under 1 year	1-4 years	5-9 years	10-14 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65-69 years	70-74 years	75-79 years	80-84 years	85+ years

1 Counts of death by age, sex, and IHS area of residence were adjusted to compensate for race misreporting on the State death certificate.

Table A22. Life Tables for American Indian and Alaska Native Males in Navajo Area, 1996-1998 (Adjusted 1)

Average number of years remaining at beginning of age interval (7)	68.0	63.7	58.9	54.0	49.7	45.8	41.7	37.8	34.0	30.3	26.7	23.1	19.7	16.4	13.6	11.0	8.4	6.2
Total number of person-years lived in this and all subsequent age intervals (6)	6,804,048	6,704,688 6,308,355	5,814,117	5,320,759	4,830,942	4,350,199	3,879,875	3,420,315	2,974,632	2,545,543	2,135,350	1,745,743	1,380,905	1,045,914	748,456	497,532	296,509	148,991
Person-years lived in the age interval (5)	99,360	396,333 494,238	493,358	489,817	480,743	470,324	459,560	445,683	429,089	410,193	389,607	364,838	334,991	297,458	250,924	201,023	147,518	148,991
Number dying during age interval (4)	747	286 215	234	1,244	2,331	1,805	2,554	2,996	3,667	3,957	4,308	5,645	6,249	8,739	008'6	9,961	11,204	24,058
Number of living at beginning of age interval (3)	100,000	99,253 98.967	98,752	98,518	97,274	94,943	93,138	90,584	87,588	83,921	79,964	75,656	70,011	63,762	55,023	45,223	35,262	24,058
Proportion of persons alive at beginning of age interval dying during interval (2)	0.007470	0.002886	0.002369	0.012630	0.023959	0.019012	0.027426	0.033074	0.041864	0.047157	0.053876	0.074615	0.089261	0.137060	0.178107	0.220261	0.317727	1.000000
Period of life between two exact ages stated in years (1)	Under 1 year	1-4 years 5-9 years	10-14 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65-69 years	70-74 years	75-79 years	80-84 years	85+ years

1 Counts of death by age, sex, and IHS area of residence were adjusted to compensate for race misreporting on the State death certificate.

Table A23. Life Tables for American Indian and Alaska Native Males in Oklahoma Area, 1996-1998 (Adjusted 1)

Period of life	Proportion of persons alive at beginning of age	Number of living at			Total number of person-years lived in this and all	Average number of years remaining at
between two exact	interval dying during interval	beginning of age interval	Number dying during age interval	Person-years lived in the age interval	subsequent age intervals	beginning of age interval
(1) x to x+n	(2) nQx	(3) X	(4) nDx	(5) nLx	(6) T ×	(<u>7</u>
Under 1 vear	0.007701	100,000	770	99,340	6,932,961	69.3
1-4 years	0.002699	99,230	268	396,284	6,833,621	68.9
5-9 years	0.001620	98,962	160	494,366	6,437,337	65.0
10-14 years	0.001253	98,802	124	493,797	5,942,971	60.2
15-19 years	0.007770	98,678	167	491,681	5,449,174	55.2
20-24 years	0.010930	97,911	1,070	486,972	4,957,493	50.6
25-29 years	0.012762	96,841	1,236	481,198	4,470,521	46.2
30-34 years	0.016592	95,605	1,586	474,218	3,989,323	41.7
35-39 years	0.021172	94,019	1,991	465,286	3,515,105	37.4
40-44 years	0.030919	92,028	2,845	453,273	3,049,819	33.1
45-49 years	0.039777	89,183	3,547	437,478	2,596,546	29.1
50-54 years	0.068260	85,636	5,846	414,321	2,159,068	25.2
55-59 years	0.075018	79,790	5,986	384,696	1,744,747	21.9
60-64 years	0.109758	73,804	8,101	349,492	1,360,051	18.4
65-69 years	0.118617	65,703	7,793	309,474	1,010,559	15.4
70-74 years	0.235617	57,910	13,645	255,867	701,085	12.1
75-79 years	0.268581	44,265	11,889	191,377	445,218	10.1
80-84 years	0.383769	32,376	12,425	129,950	253,841	7.8
85+ years	1.000000	19,951	19,951	123,891	123,891	6.2
1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3					

Counts of death by age, sex, and IHS area of residence were adjusted to compensate for race misreporting on the State death certificate.

Table A24. Life Tables for American Indian and Alaska Native Males in Phoenix Area, 1996-1998 (Adjusted 1)

	persons alive at		- 177 AM		person-years lived	Average number of
Period of life between two exact	beginning of age interval dying during interval	Number of living at beginning of age interval	Number dying during age interval	Person-years lived in the age interval	in ints and att subsequent age intervals	years remaining at beginning of age interval
(1)	(2)	(3)	(4)	(2)	(9)	(2)
x to x+n	nQx	Ϋ́	nDx	nLx	Tx∵	Ex
Under 1 vear	0.009441	100,000	944	99,191	6,639,842	66.4
1-4 years	0.002900	99,056	287	395,542	6,540,651	0.99
5-9 years	0.002260	98,769	223	493,226	6,145,109	62.2
10-14 years	0.003905	98,546	385	492,069	5,651,883	57.4
15-19 years	0.013527	98,161	1,328	487,845	5,159,814	52.6
20-24 years	0.016312	96,833	1,580	480,351	4,671,969	48.2
25-29 years	0.021724	95,253	2,069	471,232	4,191,618	44.0
30-34 years	0.024084	93,184	2,244	460,534	3,720,386	39.9
35-39 years	0.035020	90,940	3,185	447,006	3,259,852	35.8
40-44 years	0.038615	87,755	3,389	430,595	2,812,846	32.1
45-49 years	0.055996	84,366	4,724	410,593	2,382,251	28.2
50-54 years	0.068848	79,642	5,483	385,212	1,971,658	24.8
55-59 years	0.082656	74,159	6,130	356,198	1,586,446	21.4
60-64 years	0.119299	68,029	8,116	320,581	1,230,248	18.1
65-69 years	0.171730	59,913	10,289	274,426	299'606	15.2
70-74 years	0.216769	49,624	10,757	221,566	635,241	12.8
75-79 years	0.252091	38,867	9,798	169,654	413,675	10.6
80-84 years	0.326963	29,069	9,504	120,921	244,021	8.4
85+ years	1.000000	19,565	19,565	123,100	123,100	6.3

Counts of death by age, sex, and IHS area of residence were adjusted to compensate for race misreporting on the State death certificate.

Table A25. Life Tables for American Indian and Alaska Native Males in Portland Area, 1996-1998 (Adjusted 1)

Total number of person-years lived Average number of in this and all years remaining at subsequent age beginning of age intervals (5) (7)	6,791,591 67.9	6,692,403 67.6	6,296,979 63.8	5,803,918 58.9	5,311,717 54.0	4,822,340 49.5	4,338,545 45.1	3,861,631 40.8	3,391,931 36.4	2,931,219 32.2	2,484,073 28.3	2,055,040 24.6	1,646,592 20.7	1,261,690 17.0	910,255 13.8	608,146 11.2	366,870 8.8	193,136 6.9	84,937 5.4
Total person in th subse in	6,7	6,6	6,2	5,8	5,3	4,8	4,3	က် ထိ	3,3	2,9	2,4	2,0	1,6	1,2	9	9	36	9	8
Person-years lived in the age interval (5)	99,188	395,424	493,061	492,201	489,377	483,795	476,914	469,700	460,712	447,146	429,033	408,448	384,902	351,435	302,109	241,276	173,734	108,199	84,937
Number dying during age interval (4)	947	332	196	247	903	1,276	1,472	1,431	2,181	3,285	4,043	4,213	5,236	8,195	11,503	12,730	14,020	11,966	15,824
Number of living at beginning of age interval (3)	100,000	99,053	98,721	98,525	98,278	97,375	660'96	94,627	93,196	91,015	87,730	83,687	79,474	74,238	66,043	54,540	41,810	27,790	15,824
Proportion of persons alive at beginning of age interval dying during interval (2)	0.009468	0.003352	0.001981	0.002504	0.009186	0.013107	0.015313	0.015119	0.023400	0.036098	0.046083	0.050339	0.065889	0.110384	0.174176	0.233411	0.335324	0.430602	1.000000
Period of life between two exact ages stated in years (1) x to x+n	Under 1 year	1-4 years	5-9 years	10-14 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65-69 years	70-74 years	75-79 years	80-84 years	85+ years

1 Counts of death by age, sex, and IHS area of residence were adjusted to compensate for race misreporting on the State death certificate.

Table A26. Life Tables for American Indian and Alaska Native Males in Tucson Area, 1996-1998 (Adjusted 1)

Period of life between two exact ages stated in years (1)	persons alive at beginning of age interval dying during interval (2)	Number of living at beginning of age interval (3)	Number dying during age interval (4)	Person-years lived in the age interval (5)	person-years lived in this and all subsequent age intervals (6)	Average number of years remaining at beginning of age interval (7)
Inder 1 year	0.012855	100,000	1,286	98,898	6,159,366	61.6
1-4 vears	0.000981	98,714	26	394,626	6,060,468	61.4
5-9 years	0.002145	98,617	212	492,497	5,665,842	57.5
10-14 years	0.007295	98,405	718	490,793	5,173,345	52.6
15-19 years	0.017762	97,687	1,735	484,568	4,682,552	47.9
0-24 years	0.016017	95,952	1,537	476,050	4,197,984	43.8
25-29 years	0.030351	94,415	2,866	465,103	3,721,934	39.4
30-34 years	0.036367	91,549	3,329	449,754	3,256,831	35.6
35-39 years	0.054723	88,220	4,828	429,438	2,807,077	31.8
40-44 years	0.051095	83,392	4,261	406,675	2,377,639	28.5
45-49 years	0.084785	79,131	6,709	379,697	1,970,964	24.9
50-54 years	0.103865	72,422	7,522	344,278	1,591,267	22.0
55-59 years	0.089186	64,900	5,788	310,718	1,246,989	19.2
60-64 years	0.182229	59,112	10,772	269,593	936,271	15.8
5-69 years	0.176415	48,340	8,528	220,863	666,678	13.8
70-74 years	0.266293	39,812	10,602	172,889	445,815	11.2
'5-79 years	0.173507	29,210	5,068	133,284	272,926	9.3
80-84 years	0.643738	24,142	15,541	80,772	139,642	2.8
85+ vears	1.000000	8,601	8,601	58,870	58,870	6.8

1 Counts of death by age, sex, and IHS area of residence were adjusted to compensate for race misreporting on the State death certificate.

